

REMARKS

This Amendment is in response to the Office Action mailed on October 6, 2006. Claim 11 is amended and is supported, for example, in the specification on page 2, lines 29-31, page 3, lines 4-11 and page 5, line 33-page 6, line 15. No new matter is added. Claims 11-15 are pending.

§102(e) Rejections:

Claims 11-13 and 15 are rejected as being anticipated by Kikukawa (US Patent No. 6,329,036). Claims 11-13 are rejected as being anticipated by Ohno (US Patent No. 6,033,535). These rejections are traversed.

Claim 11 is directed to a method of manufacturing an information recording medium that requires, among other features, forming a recording layer with a material expressed by a composition formula of $[(\text{Ge}, \text{Sn})_A \text{Sb}_2 \text{Te}_{3+A}]_{100-B} \text{M}_B$, where $0 < A \leq 10$, $0 < B \leq 20$ and M is at least one of Ag, Al, Cr, Mn or N. By using this composition formula, an information recording medium can be manufactured that prevents deterioration of repeated-rewriting performance and prevents deterioration in crystallization sensitivity over time (see page 3, lines 4-11). Furthermore, using the material composition formula of claim 1 also provides a material with an increased crystallization rate (see page 5, line 33-page 5, line 15).

Kikukawa does not disclose or teach or suggest these features. In particular, nowhere does Kikukawa disclose or teach or suggest a method of manufacturing an information recording medium that includes forming a recording layer with a material expressed by a composition formula of $[(\text{Ge}, \text{Sn})_A \text{Sb}_2 \text{Te}_{3+A}]_{100-B} \text{M}_B$, where $0 < A \leq 10$, $0 < B \leq 20$ and M is at least one of Ag, Al, Cr, Mn or N. In contrast, Kikukawa is directed to an optical recording medium that includes a recording layer composed of Ag, In, Sb and Te as main components and Ge or N as additional components such that the component elements are represented by the formula: $\text{Ag}_a \text{In}_b \text{Sb}_c \text{Te}_d$ where $a = .2$ to $.2$, $b = .02$ to $.2$, $c = .35$ to $.8$, and $d = .08$ to $.4$ (see column 9, lines 12-29). Thus, Kikukawa uses a completely different composition formula for forming a recording layer. For at least these reasons claim 11 is not unpatentable over Kikukawa. Claims 12, 13 and 15

depend from claim 11 and should not be unpatentable over Kikukawa for at least the same reasons.

Ohno also does not disclose or teach or suggest these features. In particular, nowhere does Ohno disclose or teach or suggest a method of manufacturing an information recording medium that includes forming a recording layer with a material expressed by a composition formula of $[(\text{Ge}, \text{Sn})_A \text{Sb}_2 \text{Te}_{3+A}]_{100-B} \text{M}_B$, where $0 < A \leq 10$, $0 < B \leq 20$ and M is at least one of Ag, Al, Cr, Mn or N. In contrast, Ohno is directed to an optical information recording disk that includes a recording film that comprises the components of Ge, Te and Sb in specific proportions found in the ternary system diagram of Figure 8 under the points: A: (Ge, Sb, Te) = (50, 0, 50); B: (Ge, Sb, Te) = (0, 40, 60); C: (Ge, Sb, Te) = (0, 55, 45); and D: (Ge, Sb, Te) = (45, 10, 45) (see column 4, lines 30-43 and Figure 8). Thus, Ohno uses a completely different composition formula for forming a recording layer. For at least these reasons claim 11 is not unpatentable over Ohno. Claims 12 and 13 depend from claim 11 and should not be unpatentable over Ohno for at least the same reasons.

§103(a) Rejections:

Claim 14 is rejected as being obvious over Kikukawa in view of Ohno. This rejection is traversed. Claim 14 depends from claim 11 and should be allowed for at least the same reasons discussed above. Applicants do not concede the correctness of this rejection.

Claims 14 and 15 are rejected as being obvious over Ohno in view of Kikukawa. This rejection is traversed. Claims 14 and 15 depend from claim 11 and should be allowed for at least the same reasons discussed above. Applicants do not concede the correctness of this rejection.

Conclusion:

Applicants respectfully assert that claims 11-15 are now in condition for allowance. If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Applicants' primary attorney-of record, Douglas P. Mueller (Reg. No. 30,300), at (612) 455-3804.



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Respectfully submitted,

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